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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/554,709

10/27/2005

Hiraku Kawasaki

DK-US030689

9367

22919 7590 03/09/2010
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EXAMINER

CLARK, GREGORY D

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/09/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/554,709</p>	<p>Applicant(s) KAWASAKI, HIRAKU</p>	
	<p>Examiner GREGORY CLARK</p>	<p>Art Unit 1794</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 26 February 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: _____.
- Claim(s) objected to: _____.
- Claim(s) rejected: 27-29,31-33,35-42,44-46 and 48-52.
- Claim(s) withdrawn from consideration: 1-26,30,34,43 and 47.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
Please see Attachment.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1794

/GREGORY CLARK/
Examiner, Art Unit 1794

Continuation of 11:

Kamiya teaches the surface treatment of a plate-like substrate with a coating (paragraph 8 and abstract). Kamiya discloses that the coating resin / formulation is a blend of melamine resin or epoxy resin with an acrylic resin which is the same as disclosed on page 13 line 18 of applicants' specification.

Lever teaches the treatment of plate material (heat exchange fins, Column 1, lines 8-10) that imparts hydrophilicity and corrosion resistance to the plate material surface (Column 2, lines 33-37). Lever teaches that condensed water readily forms spherical drops as the surface of the fins that has a hydrophobic nature and these water droplets interfere with air flow in the spaces between the fins (Column 1, lines 19-22).

The inventions of Kamiya and Lever are directed to the protection of a plate substrate. Kamiya is directed to a hydrophobic coating and Lever is directed to a hydrophilic coating.

One of ordinary skill in the art at the time of the invention would see the advantages of having a plate material protected by a combination of hydrophobic and hydrophilic properties.

Hydrophobic coatings are noted for repelling water on a surface. However, the resulting droplets of water can cause corrosion of the surface over time and interfere with air flow in the spaces between the fins. Hydrophilic coating are noted for allowing water to wet out on a surface which would likely permit a higher percent of the water to be dislodged from the plate surface by the air flow. Thus, the combination of hydrophobic and hydrophilic properties would have been a strong reason to modify the teaching of Kamiya with Lever.

As Kamiya teaches treating the plate surface, it would have been obvious to simply apply the coating of Lever to the coated plate surface resulting in a sandwich configuration. The initial coating of Kamiya would correspond to applicants' substrate coating (hydrophobic) and the second coating (hydrophilic) would be based on the teachings of Lever would correspond to applicants' hydrophilic coating. The substrate coating would be in contact with the plate and the hydrophilic coating.

The selection of a suitable alcohol based solvent to deliver said coating that would provide the miscibility of the coating components and interfacial adhesion to the surface is considered well within the scope of one of ordinary skill in the art which would have readily been determined through routine experimentation